

## REMARKS

Claims 1-26 are currently pending and rejected. By this Amendment, no claims are cancelled, claims 1-2, 4-5, 7-19, 22, and 24-26 are amended, and no new claims are added. Applicants aver that no New Matter is introduced hereby.

Entry and favorable consideration of this Amendment is earnestly solicited so that the claimed subject matter hereof may timely pass to issuance as U.S. Letters Patent.

### Claim Rejections under 35 U.S.C. §102

Claims 1, 4, 8-10, 14-16, 22, 23, and 26 stand rejected as allegedly anticipated by the '328 patent to Foster et al. (Foster) under 35 U.S.C. §102(b).

Applicants respectfully traverse the rejections.

For a rejection grounded in anticipation to prevail, the applied reference must disclose or depict *each and every limitation of each claim rejected*.

As illustrated with close reference to Foster, no timing-based techniques are described or depicted therein; in contrast, the *title* of the instant application is "Timing Techniques for Magnetic Resonance Imaging." That is, Foster cannot be said to fairly anticipate the claimed invention is it relies upon optical coupling and parallel-resonant circuits without any mention of any timing relationship between therapy delivery (and cardiac sensing) and MRI timing.

The claims, as amended, clearly include limitations relating to "timing" and "temporal" coordination between MRI imaging techniques (procedures) and therapy delivery and/or physiologic sensing by an IMD.

To wit (from Foster's description of FIG. 5 – which the Examiner appears to consider relevant to the claimed invention):

As is known to those skilled in the art, **parallel-resonant circuits** have very high impedances at or near the resonant frequency of the circuit and **essentially perform as open switches at such resonant frequencies**. When the parallel resonant circuit becomes functional (see step 448), it then prevents current at or near the resonant frequency from passing through it. Thus, when this parallel-resonant circuit is interconnected between a cardiac assist device circuit and cardiac leads and is functional, it will effectively open the circuitry of the cardiac assist device, totally inhibiting current induced by the radio frequency fields of the MRI system from flowing to the device or via the leads to the heart (see step 450).

Therefore, the functional resonant circuit prevents the occurrence of deleterious effects on the cardiac assist device and the heating of the electrodes placed in the cardiac tissue. Thus, in the device of this application, the parallel resonant circuit which is activated provides means for ceasing the furnishing of electrical impulses from a cardiac assist device to a patient's heart; when alternating currents are supplied which deviate from frequency at which resonance occurs in the parallel resonant circuit, current is allowed to flow to the device, the amount of flow depending upon the deviation from the resonant frequency. Consequently, when the parallel circuit is not activated (at frequencies more or less than the resonant frequency), it acts as a closed switch, and there is provided means for furnishing the electrical impulses to the heart.

Thus, it is clear that Foster fails to anticipate the cited claims and the rejection should be withdrawn.

#### **Claim Rejections under 35 U.S.C. §102**

Claims 6 and 19-21 stand rejected as allegedly anticipated by the '906 patent to Terry et al. (Terry) under 35 U.S. C. §102(e).

Applicants respectfully traverse the rejections.

For a rejection grounded in anticipation to prevail, the applied reference must disclose or depict *each and every limitation of each claim rejected*. Like Foster, Terry fails to include any temporal (or timing) aspect – unlike the claimed invention. As such, Terry cannot fairly be said to anticipate the claimed invention and the rejection should be withdrawn.

Applicants respectfully traverse the rejections.

For a rejection grounded in anticipation to prevail, the applied reference must disclose or depict *each and every limitation of each claim rejected*.

#### **Claims Rejections under 35 U.S.C. §103**

Claims 2, 3, 7, 11-13, 17, 18, 24, and 25 stand rejected as allegedly unpatentable over Foster in view of the '901 published application of Greatbatch (GB) under 35 U.S. C. §103(a).

Applicants respectfully traverse the rejections.

As with Foster and Terry, GB offers nothing in the way of coordinated timing of MRI procedures and operation of an IMD. Thus, the proposed combination surely fails to reach the basic required threshold of providing a *prima facie* case of obviousness and must be withdrawn.

### **Conclusion**

In view of the foregoing, it is believed that the application is now in condition for allowance and Applicant(s) respectfully request the Examiner to issue a Notice of Allowance in due course so the instant invention can pass to timely issuance as U.S. Letters Patent.

The Examiner is invited to contact the undersigned with any questions regarding this application

Respectfully submitted,

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